UNESCO SOURCES

No. 51 - OCTOBER 1993

EASTERN EUROPE

A BAPTISM OF FIRE

DELIBERATE ANNIHILATION

• • • Your dossier on the Yugoslav (Courier No. 11/December 1982) was well presented. I did however, have a problem with "Strengthening the Law." Among awareness in the Yugoslav army would not have helped because the destruction of Dubrovnik was not about ignorance. It's about deliberate annihilation of a cultural heritage – that is to say, the attempt of Croatia's history by the Yugoslav army. Just as a Serbian officer corps. Until this is realized, the situation in Croatia will not be understood.

THE ONLY LINK

• • • Your magazine is very useful to our cultural planning activities and this, in most instances, is the only link to cultural information from overseas sources.

A GOOD ANALYSIS

• • • It was with great interest that I read the dossier in your June No. 06 issue devoted to the media. I found your analysis of the African press, in the article entitled "An Unsolidet Path," particularly remarkable. It gives a very clear picture of the difficulties with which this press is confronted today.

The International Programme for the Development of Communication (IPDC) should be encouraged because like everywhere else, there can be no democracy in Africa without a free press.

BLAMES THE GOOD AND EXCULPATES THE BAD

• • • I consider the "Facts and Figures" on your June issue (pp. 12-13 in Source No. 48) on the media to be scandalous. Unless it has other reasons are rational, not rejected. To present "regional" averages of the developed Republics vers Provinces" study violates the key purpose of the study and actually blames the good and exculpates the bad governments in each region. In any case, the misrepresentation has totally damaged your credibility.

Our decision to present regional averages stemmed from two limitations: 1) the study sample did not mention many countries for which no reliable information was available. 2) even if it had been available, the scale of our map would have rendered such information for each country illegible. In any case, we continue to view these regional averages as significant. – ED.

LOOKS AND LEGIBILITY

• • • A faithful and assiduous reader of UNESCO Courier, I nonetheless feel that you neglect the appearance of the magazine, notably the page make-up which is rigid and rather monotonous. These pages are, moreover, far too dense. They need to be opened up.

In spite of my criticism, however, I want you to know that I consider Courier to be basically a magazine of quality which would become far more legible by gaining in look

MAGICAL?

• • • That night for the magic hours. Really? In any case this is how you describe in your last issue (July/Aug. No. 8/9) the charity musical magic-show given by Jean Michel Jarre at Mont Saint Michel. It was to open an honour for the occasion to have been named a UNESCO Goodwill Ambassador, but the article casts serious doubt on the ethical sense to which your magazine has accustomed us to aspire.

Without passing judgment on Jarre's music, it can safely be said that the Mont Saint Michel concert was not a "magical night" at least not for the tens of thousands of automobilists caught in mega traffic jams, the tens of thousands of other spectators who, although they arrived on the spot, could see nothing and the workers who tackled the mammoth job of cleaning up afterwards.

We expect to be in close touch on all the world's prestigious cultural sites. But to forget that these marvels are also fragile and, in any case, were erected for other worlds than that of marketing for mega-shows. Several years of fact-finding collective, in the public interest, have refused him permission to attract each and such a site.

It is frightening to read that for good you will take Jarre to Saint-Jacques de Compostelle, Versailles, and other places associated on UNESCO's World Heritage List.

A CULTURE OF PEACE

As this issue was being finalized, Moscow saw the rise and fall of a rebellion that claimed dozens of lives. According to observers, the "post" communist period in Russia remains an unknown quantity, the consequences of which are, nonetheless, being felt throughout the entire ex-Soviet Union and beyond.

Yesterday it was Moscow. But for far too long now, terrible conflicts have ravaged Somalia, Angola, Liberia, Afghanistan and ex-Yugoslavia. Other countries, such as South Africa and several of the former Soviet Union Republics, are heading towards or are on the verge of conflagration. The overthrow of totalitarianism has opened a perilous transition period that has given rise to more armed conflicts than at any time since the Second World War, conflicts which, in all probability, will continue to multiply.

Right from the start almost 50 years ago, UNESCO's supreme goal - its raison d'etre - has been peace and its corollary, the respect of human rights. In recent years, this goal has perhaps become slightly lost from view. However, the Member States are now working to bring it back into perspective - in other words, they are going back to the roots. The implementation of the "Agenda for Peace" has become a UN priority. The promotion of a "culture of peace" will be one of the main issues dealt with at the next session of UNESCO's General Conference, which will be held in Paris from October 25 to November 16.

The objective is clear: to maintain peace, or as the case may be, re-establish it. The philosophy behind this undertaking is also clear: to substitute cooperation for confrontation between those powers, between and within nations, that are heading towards an outbreak of conflict. Succeeding in this quest means starting from scratch to find the ways and means of achieving the necessary revolution in the hearts and minds of the world's peoples.

UNESCO is tackling this task in El Salvador and South Africa. It is ready to do the same in Cambodia and Lebanon. The wonderful light on the horizon shared by Palestinians and Israelis alike, opens another major arena for this vital undertaking, with as reward the 40 year old dream of peace in the Middle East.

René LEFORT

READER

CONTENTS

The school: a bastion of psychological security.

PAGE AND SCREEN 4

PEOPLE 5

FOCUS

PAGES 6 to 16

EASTERN EUROPE: A BAPTISM OF FIRE

And tomorrow?

PLANET :

Science:
• WE WERE "THE FORERUNNERS" 18

Science:
• HOW FAR SHOULD WE GO? 20

Culture:
• THE BUSINESS OF CITIZENS 22

Education:
• "STATUS AND TRENDS" 23

LOOKING AHEAD 24

Historic cities: how to save them?

Editorial and Distribution Services : Unesco Sources, 7 place de Fontenoy, 75700 Paris. Tel. : (1) 45 68 10 00, Fax : 45 67 30 72, Telex : 200472 France. **This magazine is destined for use as an information source and is not an official Unesco document. ISSN 1014-6989.**

Cover photo :
GAMMA/Alexis Duclos

UNESCO SOURCES

All articles are free of copyright restrictions and can be reproduced, in which case the editors would appreciate a copy. Photos carrying the copyright mark © may be obtained by the media on demand.

BOOKS

THE WORLD's SAVANNAS: Economic Driving Forces, Ecological Constraints and Policy Options for Sustainable Land Use.

In this book, natural and social scientists examine the world's savannas for the first time within an integrated economic, social and environmental framework. "Savannas," broadly defined as tropical grassland with scattered trees, are the most common tropical landscape, found in over 20 countries on all four tropical continents. Historic factors indicate that people have lived in African savannas for more than a million years, but in the American savannas for less than 30,000; in the last 50 years, however, population pressure has intensified to the point where these ecosystems could become seriously degraded. Presenting economic and ecological forces and policy principles - ecological constraints, land tenure for pastoral communities and in private and mixed property regimes, this work then looks at

grazing systems in different countries, and, finally, provides guidelines for an environmentally sustainable, economically profitable and socially equitable future for these areas.

● *The World's Savannas: Economic Driving Forces, Ecological Constraints and Policy Options for Sustainable Land Use*, edited by M.D. Young and O.T. Solbrig. MAB Book Series, Vol. 12. UNESCO/Parthenon Publishing, 1993, 350 pp., 380 FF.

ALTERNATIVE MEDIA: Linking Global and Local.

This study, edited by Peter Lewis, a Visiting Fellow in the Communications Policy Research Centre at City University, London (U.K.), is based on the premise that there are many sectors, communities and minorities whose access to information, and means of self-expression, are not guaranteed by mass channels, and that more sharply focused, customized and essentially smaller or local media are important in filling the gap. It includes reports on nine alternative media projects including: different forms devoted to the empowerment of women (Morocco/India/Jamaica); remote Aboriginal community broadcasting (Australia); miners' radio and peasant radio (Bolivia); or the alternative press in a transitional society (Belarus). The case studies also trace the evolution of alternative media from its origins to modern times when it has had to accommodate to new political, economic and technological conditions.

● *Alternative Media: Linking Global and Local*, edited by Peter Lewis. Reports and papers on mass communication No. 107. UNESCO, 1993, 130 pp., 58 FF.

PERIODICALS

THE INTERNATIONAL SOCIAL SCIENCE JOURNAL

Comparative Political Sociology

In this issue (136), devoted to a comparative study of topics ranging from democracy to the concept of a ruling class, and from inequality and nationalism to Third World regimes, the approaches of political science and of sociology are combined in a quest for a deeper understanding of the difficulties of achieving legitimacy and stability. Even the article by John P. LeDonne of the Russian Center at Harvard, focusing on a single country, has a comparative outlook. His study of Tsarist Russia as the perfect model of a ruling class, can serve as a reference point to evaluate other ruling classes.

NATURE & RESOURCES

Towards cleaner production methods

In this issue, the UN Environment Programme (UNEP) joins with UNESCO to describe progress being made in shifting industry from pollution treatment to cleaner production and products. One article sets out to show that "Cleaner Production is Better Business". Others describe the problems, and some pro-

gress, of industrial pollution in China, integrating cleaner production concepts into university courses, policy options, and public participation. The magazine, however, points out that to continue the transitions to sustainable development, equal attention must be paid to modifying consumption patterns. "Generally speaking," insists N&R, "this means much higher efficiencies in the North, controlling population growth in the South, and dealing more effectively with equity issues everywhere."

THE UNESCO COURIER

A Farewell to Arms

"Up until now," editorializes the October Courier, "disarmament has been a kind of utopia. Has it at last become possible?" While noting that "the landscape in Post-Cold War Europe calls for a total rethink of disarmament," articles point out that the political, economic and technological resources devoted to armaments are still on the increase, the international arms trade is still flourishing, and the arms industry continues to be a key sector in the world economy. Seeking solutions for the dilemma, one author insists that "the principle of deterrence still carries too much weight in disarmament negotiations," while another suggests that to check the spread of nuclear arms, we must stop thinking they are synonymous with security. This issue also includes an interview with Nobel Prize-winning American geneticist James D. Watson.

RECORDS

BAHRAIN: Fidjeri: Songs of the Pearl Divers

Bahrain, an archipelago in the Gulf of some 30 islands and 498,000 inhabitants, has been a centre of civilisation since ancient times. Before 1932 when oil was discovered and Japanese competition of cultivated pearls began, more than 90 per cent of the population were fishermen, pearl divers, sailors or shipbuilders. It is not surprising, therefore, that a well-established musical genre exists. Called Fidjeri, a term for all "sea musics", it is performed by male pearl divers. It involves dance movements, but is mainly vocal, the voices accompanied by clapping, drumming, small cymbals and empty water jars. The texts describe the hard life of pearl divers, the dangers of the sea, the joys of meeting the family again, and often contain, as well, prayers to Allah, Mohammed and Ali.

● *Bahrain: Fidjeri: Songs of the Pearl Divers*. Musics & Musicians of the World series. UNESCO/Auvidis. Cassette 52 FF, CD 109 FF.

Publications and periodicals are on sale at the UNESCO Bookshop, or by order from UNESCO Publishing, 7 place de Fontenoy, 75352 Paris 07 SP, and in Member States through national distributors. Catalogue on request.

JOSE ZANINE: A BAREFOOT ARCHITECT

The twenty-first century will be the century of intelligence, and those who do not use their brains will die. Worse: they won't even be buried!"

Pronouncing this phrase with jubilation, the deeply lined and burnished face of Brazilian architect Jose Zanine Caldas breaks into a wide smile.

The life of one of Brazil's great builders is a wise and joyful mixture of intelligence, raw epicureanism, and an almost obsessive passion for the natural riches of his country.

His latest work, a house whose extraordinary simplicity belies its sophisticated conception, was on view at Headquarters last September at a show organized with the Grenoble architectural group CRA Terre.

The skeleton of the house is formed of tree trunks cut to the same length and skinned of their bark. Jose Zanine never stops singing the praises of Brazilian wood which makes *the best musical instruments, ships and even planes, whose sap is so rich and flowers so fragrant".*

This frame is based on two modules: rectangles and pillars of three trunks on a triangular base leaving space inside for a cupboard or closet. Walls are of sun-dried mud bricks. With about $100 and a little help from friends, the house can be built by the family which chooses it as home.

For a maquette, never a blueprint, Zanine sculpts and disposes his material – invariably wood – with a sharp sense of space. He began his career by making about 700 maquettes for Brazilian constructions, *"the children of Le Corbusier",* using his hands and eyes to perfect his art, since *"the brain only registers what the eyes see".* His materials are raw, never bought or manufactured because he refuses *"the money game".*

His best known works, some 50 sumptuous villas in the Jovatinga quarter overlooking Rio, were built entirely of materials recuperated in houses torn down to make room for the metro.

Jose Zanine may adapt his art to different situations, but he always follows the same rules: *"the greatest simplicity"* at *"the lowest cost,"* and *"a labour of love"* because working this way, he says, *"I constantly revel in the greatest gifts life has to offer."*

R. L.

LALLA BEN BARKA: AROUSING WOMEN IN MALI

The Honorable Mention of this year's King Sejong Literacy Prize has been awarded to a remarkable woman with a seemingly impossible mission: battling for women's literacy in Mali, a vastly illiterate (76%) country bound by tradition and bias.

Lalla Ben Barka, who holds a PhD in Adult Education from the University of Southern California, initially took up teaching – following in her mother's footsteps – but soon discovered that the classroom was not her calling. Because it was, rather, the larger issues of education that moved her, she joined her Education Ministry's Division of Pedagogic and Linguistic Research, later heading the Women's Promotion Division, where her drive and grit were seen, and resented, as masculine characteristics.

Nonetheless she threw herself into the job, mobilising all available forces, using a community-based approach, with the emphasis on the environment, hygiene and family health, and the role of women in the diffusion of information. She also instigated and coordinated research and analysis in women's literacy and training.

The road has been long and hard. *"Fifteen years ago, the female literacy rate in Mali was 10 percent, and our education system was a shambles",* she says. *"Our efforts in basically conservative villages were resented by both men and women,"* she confesses. *"They felt we were going too far too fast."*

Moreover, her sojourn abroad had imbued her with a *"feminist student culture"* that proved incongruous at home. *"I would ask the women: 'Why should men chat, loll and make decisions while you work?' Why don't they help you?' 'Men can't work twice',* they answered. *'They must rest by day so that they can work by night!'"*

She tried to introduce women to the wheelbarrow for carting wood. *"Machines are for men",* they replied. *"We are ignorant."*

"We were creating artificial situations", she concedes. *"What we needed to do was to help, but the solutions had to be theirs."*

Through programmes funded wholly or partially by UN agencies and NGOs, Lalla Ben Barka seized every available resource – radio, video, informal discussions – to instil confidence and awareness in women. And while results have been slow, (the female literacy rate now stands at about 24%), the generosity of her spirit has never flagged. *"I was privileged to go to school",* she says. *"My conviction, faith and philosophy is to help others, and I will fight to the end to ensure access to education for all."*

Latika PADGAONKAR

● An Interagency Task Force, convened in early September by the Department of State, has recommended that, as of October 1995, the **UNITED STATES SHOULD REJOIN UNESCO**, from which it withdrew in 1984. A resolution sponsored by 23 members of Congress also urges return as do many educational and scientific organizations like the American Federation of Teachers, the National Education Associations, or the National Academy of Sciences. *"For America's intellectual community,"* a U.S.-UN Association panel said, *"UNESCO uniquely provides the universal framework and networks for collaboration with counterparts around the world, even where politics would otherwise make contact impossible."*

DEMOCRACY IN EASTERN EUROPE: A BAPTISM OF FIRE

What comes "after" communism? Democracy, it's hoped. But the labour pains are harrowing, as recent events have demonstrated. Economic upheaval, falling living standards and political instability plague the region, dashing hopes and sowing the seeds of discontent. What role can an organization like UNESCO play in this delicate transition phase? For a start, it can help these countries overcome the effects of a succession of disasters such as Chernobyl (pp. 15-16), or assist prestigious institutions like the Hermitage Museum or the Bolshoi Theatre (p. 11) to surmount their difficulties. It can focus attention on areas until recently ignored, such as the training of environmental scientists (p. 9), and contribute to the reconstruction of entire sectors such as national education systems (p. 10). The gravity of the situation in certain countries, as illustrated by Albania's education system (pp. 12-13), or the "brain drain" phenomenon (p. 14), is such that international aid is not only justified, but absolutely vital.

A shopkeeper can never replace an intellectual, was the message of a thousand or so university teachers who demonstrated outside Moscow's Gorky Park in September to win just a small increase in their meagre salaries. They earn no more than 40,000 rubles ($40) a month and it costs 15,000 rubles simply to cross the city in a taxi.

None of Moscow's multitude of shopkeepers can replace a ballerina, a violinist or a nurse either. And the dazzling displays in the new "super-store" can't replace museums any more than the endless foreign soaps on TV can replace local film production.

Four years after the fall of the Berlin Wall, the world press is full of the ills gripping Eastern Europe: political instability, wars, recession. Production has been falling in Central and Eastern Europe for at least three years, says the European Bank for Reconstruction and Development (EBRD) in its 1992 annual report, while pointing out the serious efforts being made to get away from state-ordered economies. According to the report, artificially low unemployment figures have become high everywhere, even by Western standards, and will continue to rise. And everywhere budgets are weighed down by deficits of up to 20 percent of GDP, sometimes more.

This has threatened monetary stability. In some places, inflation has become astronomical: 2,000 percent in Russia and more than 13,000 percent in Ukraine, whose plight a World Bank vice-president has described as *"hyper-inflation"*. *"Central and Eastern Europe face the well documented difficulties, however there are signs of hope"* stresses one EBRD official, Matthias von Bismarck-Osten, noting a pick-up in foreign investment.

DIVERSITY

There's also a world of difference between Poland, Hungary and Estonia on the one hand and war-torn ex-Yugoslavia and Tajikistan or the stagnant Ukraine on the other. In fact, there is no single "Central and Eastern Europe", there are, at best, sub-regions linked by history and culture.

"People like to talk of the "Third-World-ization" of Eastern Europe and that's maybe true, depending on the sectors involved and the criteria you use," says Russia's ambassador to UNESCO, Vladimir Lomeiko. *"But you mustn't forget the huge potential of a country like Russia — not just its structures and natural resources but its scientific and cultural wealth. The problem is how to use it all."*

Klaus Bahr, a retired UNESCO official who specialised in education in Eastern Europe, observes that in the Third World *"you have to start from scratch, while in Eastern Europe there's a lot of potential and it mustn't be lost. So we have to come up with completely new solutions and not just import them from elsewhere."*

A glance at the situation in some of UNESCO's domains alone, is revealing. Good libraries exist, for example, but, just as they are opening their doors up to the general public for the first time, having previously been reserved for researchers, frustrated librarians can no longer afford foreign periodical subscriptions. Dismayed juvenile delinquency centre workers are being overwhelmed by seasoned young drug dealers and prostitutes. Scientists and doctors are working as taxi drivers, while curators battle against theft from their museums. The scientific community does not have enough experts to dismantle the nuclear arsenal, and officials are wrestling with the disappearing Aral Sea and the dangers of nuclear power stations.

The picture is not all black however. A new class of wealthy is giving to charity, big museums are showing their best works abroad to raise the hard currency they need to keep going and sponsoring is taking hold. The press is struggling to expand its freedom and the ivory towers of old are becoming glasshouses.

ALL ARTICLES ARE FREE OF COPYRIGHT RESTRICTIONS. SEE P. 3

For Vladimir Lomeiko, *"pressure comes from the continued decline of living standards, the crisis of executive power, the moral vacuum, trends towards extremism and ethnic-based discrimination. If we are to prevent social cataclysm we must create the stable democratic institutions of a pluralistic, law-governed state with a civilized, free-market economy. We need handbooks, manuals and training on how to run parliaments, along with new policies on the environment or ethnic problems. We need human rights centres, a network of European universities and a free press. A new democracy needs international help with these things. It needs cash but also the experiences of the old democracies. UNESCO can play a big role, even if its bureaucracy is sometimes slow to wind itself up."*

EVERYTHING UP FOR DEBATE

But international aid is often too narrowly economic or financial and too short-term. With all the dizzying changes, people are arguing about who they are, where they come from, the languages they speak and what they believe in. Everything is up for debate, hence the huge role of education in training the new society and its managers. Ask Matthias von Bismarck of the EBRD why this doesn't seem to be a big priority for the major international funding agencies and he replies that while education is *"certainly very important in most Eastern European countries, it is by no means bad. Some disciplines such as Marxism or Leninism should perhaps be replaced by accounting and similar exercises."* However many specialists disagree, and stress the vast gap between the real, modern economy and the seriousness of the situation.

"Defining what a country's educational system should be has become the major problem in Eastern Europe," says Alexander Pokrovsky, the UNESCO specialist who has been given the responsibility of developing a UNESCO office in Moscow. The situation everywhere is complicated by the birth of new states, the reassessment of history, the correction of the "truths" of yesterday and redefinition of the vision of society. Neglecting such basic areas as education is to take a short-term view that will damage the future.

Alan Hancock is head of a new UNESCO unit called PROCEED (Programme for Central and Eastern European Development) which aims to help. *"UNESCO very quickly understood the crucial importance of things like press freedom and has concentrated on social and cultural factors,"* he says. But its projects in Eastern Europe were fragmented. So last year PROCEED was set up to coordinate them. It seeks to respond to a unique situation, where the transition to democracy is extremely complex, through *"original modes of conceiving, stimulating, developing and financing projects and activities"*.

PROCEED, which is not a programme of activities in itself, is also charged with developing a partnership with the other institutions of the UN. Fundamentally, Hancock says, the unit wants to help *"build up networks in a region where structures have sometimes collapsed and not been replaced"*.

BUILDING HUMAN CAPACITIES

A conference held in September in Warsaw on "Education for All" and the establishment of UNESCO Chairs and university twinnings provide examples of the direction being taken. Likewise, a project to promote *"Co-operation for Reinforcing the Development of Education in Europe"* (CORDEE), and Eurolinguant which promotes language teaching.

In the scientific domain, UNESCO is working closely with the International Council of Scientific Unions (ICSU) to strengthen scientific networks, facilitate technology transfer and exchange programmes. In the case of catastrophes and refugee programmes (coordinated by the UN as a whole) there is an emergency assistance programme in which UNESCO has its part to play.

However the main contribution of the Organization is to build up those skills and human capacities which are necessary for long-term democratic survival...through education, science, culture and communication. *"It is also very much a matter of encouraging creativity, of planning new curricula, and of reflection on the role of education, science and culture in societies where the past is known, and rejected, but where the shape of the future is unknown"* says Hancock.

Some of the projects are still in the early stages because of the time it takes to get financing and put them into effect, and the problems of political instability. *Sources* will be looking at this issue again, but this month's dossier provides an idea of what is being done.

Moscow's Bolshoi Theatre and St. Petersburg's Hermitage Museum have to be helped. The victims of the Chernobyl disaster need assistance as does the press struggling to exist in shattered Sarajevo and the refugees in Croatia trying to set up an education system for their children.

But UNESCO can also take part in the current rethinking of the role of education, culture and science in societies wanting to get free of ideology and rediscover national identities blurred by decades of dogma.

The hope is that a balance can be found between the regimentation of yesterday and what Alexander Solzhenitsin calls the *"dreadful sores of budding capitalism, marked by the kind of crude and repulsive behaviour which the West has never experienced"*.

Anne BLANC (Moscow) and Nicolas MICHAUX

Previous issues of Sources have reported on UNESCO projects in Eastern Europe. These include help for the media in No. 48, the plight of Dubrovnik in No. 43, and the "Blue Danube" project in the Danube Basin in No. 31.

ALL ARTICLES ARE FREE OF COPYRIGHT RESTRICTIONS. SEE P.3

ANGHELUTA VADINEANU: PIONEER

"The preservation of the environment must become an absolute priority in all Eastern European countries"...

The pharaonic "House of the People" in Bucharest, a legacy of Ceaucescu's megalomania, dwarfs its immediate surroundings. This great hulk of a building (in terms of area covered the second largest in the world, after the Pentagon), is a veritable insult to the environment. Nearby, in an old university building hidden in a clump of trees, a professor, accompanied by a handful of specialists, is taking up what he considers to be one of Romania's major challenges today, the alarming deterioration of the environment.

He holds a "UNESCO chair", a recent initiative that aims at encouraging cooperation and exchanges among universities worldwide. The chair established at Bucharest is dedicated to "ecotechnology", a combination of ecology, engineering and management. It was established last March in co-operation with the Foundation set up by the French oceanographer and defender of the environment, Jacques-Yves Cousteau. A twinned chair of "ecotechnology" was set up at the Université Libre de Brussels, this venture being the start of an international network on this theme.

Professor Angheluta Vadineanu, aged 47, Dean of the Faculty of Biology, is a pioneer of ecology in a country where the subject was long unknown. From 1990 to 1992 he was the country's first ever Secretary of State for the Environment. He is a specialist in aquatic systems and author of a large number of reports and books and chairs the Commission on Ecology of the Academy of Sciences and collaborates both with EBRD and the World Conservation Union (IUCN).

THE BASIS FOR DEVELOPMENT

"The preservation of the environment must become an absolute priority in all Eastern European countries, especially now they have started a root and branch restructuring of their economies", he says. He stresses that *"Romania's natural assets, which are the basis for development, have deteriorated and decayed: the structure and dysfunctioning of the economy have led to severe pollution and overexploitation of resources"*. He adds that *"the enlargement of areas under cultivation, the construction of dams, and deforestation have drastically disrupted ecosystems. In this period of transition, this deterioration must first be checked, then, gradually, the damaged areas can be regenerated and some improvement in people's quality of life achieved"*.

But to do this an appropriate institutional structure is needed, and scientists who

ANGHELUTA VADINEANU (Photo UNESCO)

are at the same time managers capable of thinking in the long term. Unfortunately *"Eastern Europe offers no training in environmental management, which is one of our greatest handicaps"*.

Nor is there any logistical support for teaching and research in this area. Professor Vadineanu says that it takes him three days to achieve what specialists in the West can do in three minutes.

Finally, public awareness and public participation in decision-making has to be achieved.

The UNESCO chair is intended to respond in its modest way to all these obstacles. It does not only mean a chair from which a professor can deliver his teachings, but the formation of an active training and research team. Some 50 people are involved - technicians, researchers, teachers, and students preparing a doctorate. They hope to form a *"nucleus of researchers and, at the same time, set an example"* for both scientists and State officials at the highest decision-making levels. The Chair provides for a four-year teaching cycle, post-graduate training programmes and specialized courses lasting 10 to 12 days. Professor Vadineanu also hopes that other universities in the country will follow in his tracks.

On the map of Romania, the UNESCO/Cousteau Chair could be represented by a triangle, whose apex would be the capital, where there is a Department of Ecology in the University Faculty of Biology and a documentation centre on the environment, the other two angles indicating a research station in the Lower Danube, near the Black Sea, and another in the mountainous region of the Southern Carpathians.

A CRITICAL ZONE

Almost every month Professor Vadineanu, a native of the Lower Danube, spends several days, sometimes a week, at the Braila research station at the mouth of the great river. This picturesque region has been declared *"a critical ecological zone"*. Two laboratory-ships gather data on water and ground pollution and ecosystem changes. Their equipment is, however, inadequate. Professor Vadineanu admits, *"sometimes I wear myself out just finding fuel"*. The other research station, situated in the tourist village of Sinaia, deals with mountain ecosystems, and in particular forests.

Professor Vadineanu is convinced that only co-operation with European and international researchers and institutes *"will make it possible to confront the major challenges of the long-ignored environment"*. When he puts forward the Chair's projects, acronyms abound, IUCN, RAMSAR, UNEP, EBRD, alongside the Council of Europe and the American National Academy of Sciences. But the one that keeps reappearing most often is UNESCO. Its original contribution of $35,000 must be used for training grants, on which Professor Vadineanu is counting, since most of his collaborators are young. As he sees it, *"UNESCO has realized that the sectoral, short-term approaches of officials and the general public have extremely limited effects"*.

Corneliu VLAD
Bucharest

SEEKING THE WAY FORWARD

From crisis management to long-term vision: UNESCO helps strife-torn Armenia rethink its education system.

Over the past five years Armenia's population has been swelled by the arrival of 260,000 refugees, victims of the conflict in the Nagorno-Karabakh region. This conflict has resulted in an economic blockade that has deprived the young republic of 90 percent of its energy resources, cut off food and medical supplies and paralyzed industry and commerce. This comes on top of the devastating earthquake in Armenia in 1988 which cost more than 25,000 lives, levelled the city of Leninakan, and left tens of thousands homeless.

Add to this the collapse of the Soviet Union and the efforts to switch to a free market system and you have a country in deep crisis.

Some one million of the 3.5 million strong population still cannot live in their own earthquake damaged homes. Lack of food has resulted in weight loss and weakening of small children and pensioners, increasing the incidence of disease at a time when hospitals barely function and medecine is unavailable. Lack of fuel supplies forced the closure of all schools during the winter of 1992-93, depriving the young of access to education, which is often their only bastion of psychological security when the family and community are under stress. Since homes and public buildings were without heat, electricity or running water, smaller children were often obliged to spend many days, fully dressed in bed, covered with blankets to lessen the risk of frostbite.

Earlier this year, a United Nations Interagency Humanitarian Programme was mounted for Armenia. Out of this meeting was born a UNESCO project to help organize a thorough analysis of educational policy so that the necessary decisions could be taken to save the nation's intellectual potential.

In June, a two-person mission from the Organization visited Yerevan to meet with senior officials and work with members of a joint task force representing the Ministries of Education and of Higher Education and Science. The task force has been charged with carrying out a comprehensive analysis of educational policy at all levels. It's report will be presented at a National Education Policy Review meeting to be held before the end of the year. *"The successful preparation and presentation of this report will not only help Armenia but could also contribute to UNESCO's actions in other countries confronted with educational policy-making problems in a period of crisis and transition"* said Alexander Sannikov, who headed the mission.

The significance of this review lies in the fact that an attempt is being made to deal with issues that will affect the social and psychological well-being of the population many years after the current crisis is over. Higher education authorities, for example, are faced with the necessity of reviewing the objectives of post-secondary education. Graduates from Armenia's highly developed university and technical education system had specializations which prepared them for the vast job market of the former Soviet Union. To what extent will future economic integration of the region permit the continuation of this approach? What modifications are required to meet the immediate needs of a smaller economy serving a smaller population? What are the differences in approach dictated by a shift to an open market economy?

CURRICULA UNDER REVIEW

Similar questions face primary and secondary education. Like other former Soviet republics, Armenia is reviewing the political and social content of its school curricula. For secondary education new linkages must be visualized with both post-secondary education and the job market.

UNESCO's role in the process goes well beyond identifying a Canadian university professor specialized in policy analysis to participate in the mission and the national policy review meeting (ed. the author of the article). Potential areas of cooperation have been identified with several institutions linked to UNESCO, including the UNESCO Institute for Education in Hamburg, the International Institute for Educational Planning (IIEP), the International Bureau of Education (IBE) and the European Centre for Higher Education (CEPES).

The Armenian Academy of Sciences has promised its support in developing the national education policy review. In fact, the potential exists for using UNESCO as a means of access to broad international cooperation in all aspects of science and culture.

The Armenian experience is a test-case for ways to strengthen decision making in periods of national emergency. If decisions on long-term social policy issues can be prepared and developed during a crisis situation, rather than afterwards, precious months and years may be saved in the transition to normalcy. Years that are precious for the children and young people whose lives are being interrupted, almost postponed, waiting for events to settle.

Prof. Stacy CHURCHILL
Ontario Institute for Studies in Education, Canada

FLAGSHIP PROJECTS

The renovation and re-design of the Hermitage Museum and the Bolchoi Theatre are among high visibility, long-term projects designed to attract international funding.

Overwhelming! That's the only word for the State Hermitage Museum in St. Petersburg which, since it was set up in 1764, has accumulated some three million works to form not only a mighty symbol for Russia, but a significant part of the world's cultural heritage.

"There will never be anything anywhere quite like the Hermitage for the presentation of so great a diversity of major art in an architectural wonderland," wrote critic John Russell in a recent issue of the *New York Times*.

Visitors, in fact, may never guess that behind a sumptuous facade the Hermitage is plagued with problems, many shared by other museums, but in its case exaggerated, both because of scale and importance and the critical conditions existing in Russia.

For this reason, international support has been enlisted under a Memorandum of co-operation between UNESCO and the Russian Federation which, in the field of culture, also includes *"reconstruction and modernization"* of another powerful symbol, the Bolshoi Theatre in Moscow.

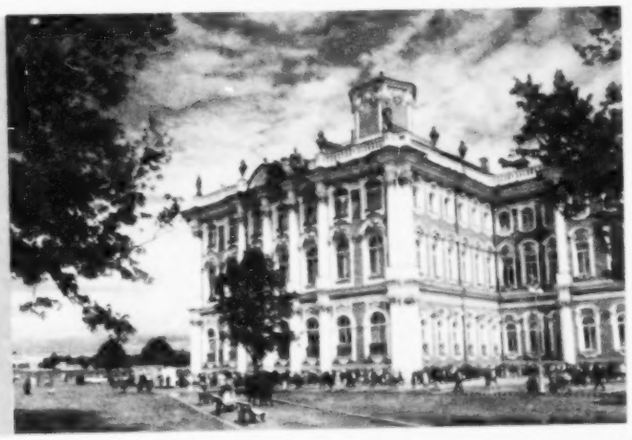
A preliminary fact-finding mission to the Hermitage last February was followed in June by a full technical mission of specialists in museum management, architectural restoration, marketing and merchandizing, and potential funding sources.

RUSSIAN TEAM

"Our main purpose," said Alan Hancock, mission co-ordinator and Director of PROCEED *"was to assess needs with a Russian team and help prepare a project under UNESCO leadership, with international donors, both public and private. In fact, the Hermitage and the Bolshoi are among what we see as priority, high visibility and long-term "flagship projects" suitable for new and varied models of financing."*

The mission's 50-page report defined a multitude of needs ranging from protection against pollution and increasing vandalism to updating managerial skills, and formulated a Project Framework, closely related to the Hermitage's own Master Plan.

Brian Stewart, Director of the Edinburgh-based architectural firm RMJ and a member of the June mission, returned to St. Petersburg in early September to continue gathering data. Back at UNESCO Headquarters, he covered a big table with computerized plans and explained that *"this time we concentrated on the Small Hermitage which the museum would like to restore with more space for temporary exhibitions, and the vast 19th century General Staff Building (ceded by the city), foreseen as a Decorative Arts Museum."*



A MULTITUDE OF PROBLEMS BEHIND A SUMPTUOUS FACADE (Photo UNESCO/ A. Varontzoff).

"Only about five per cent of collections are now on view, the goal being to show 15 to 20 per cent (the Louvre's rate)." Stewart said. *"Moreover, the number of visitors, especially foreigners, is expected to rise rapidly to about one million annually compared to a current 500 to 600,000."*

To gain even more space, the Scottish architects make *"radical proposals"* for two new buildings *"to move the Hermitage into the 21st century."* *"There is reticence,"* Stewart admits, *"still we think the Russians may be in a mood for major changes here as in other parts of society. Our role is to help the museum continue its development programme in a new political and economic context, to stimulate thinking ... and generate corporate interest."*

Geneviève Gallot, a French *Inspectrice des Musées* before taking charge of the Hermitage (and Bolshoi) project at UNESCO, sees the most urgent task as *"housing the museum's huge reserves. Work was begun on a vast storehouse, but discontinued for lack of funds,"* she said.

For Gallot, fund-raising is, in fact, pretty much the name of the game. *"With state subsidies down,"* she says, *"the UNESCO/Hermitage Project stresses development of merchandising and marketing operations and other schemes like a "Friends of the Bolshoi" organization".*

Likewise, the project framework is modular, so that donors can chose a particular building or one of some dozen components relating to the Hermitage as a whole. They can, for instance, pick up the tab for a $1,500,000 project to *"improve lighting"*, a $140,000 price tag to *"upgrade security services,"* or a more modest $75,000 *"for new labels and signs for exhibitions."*

For the Bolshoi, another report has been prepared for UNESCO by German architect Michael Dittman. *"Like all historic opera houses, the Bolshoi's problems centre on preserving the qualities which make it one of the world's great operas, while bringing it into the 21st century,"* he said.

Meanwhile, an international committee is being set up to raise funds for in-depth studies into four of the Bolshoi's urgent problems: solidity of foundations, of buildings, stage equipment and acoustics. *"According to our timetable,"* said Gallot, *"We should have a clear idea of the project along with estimated costs by mid 1994."*

"The complexity of the problems should not be underestimated" said Dittman, *"but don't forget it took 25 years to build the Sydney Opera and that the English have been bickering for 15 years over renovation of Covent Garden."*

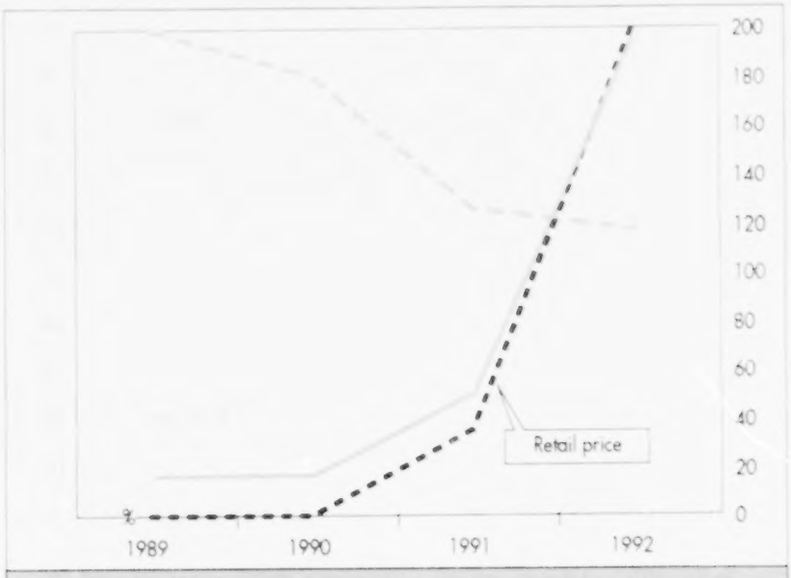
Betty WERTHER

ALL ARTICLES ARE FREE OF COPYRIGHT RESTRICTIONS. SEE P. 3

ALBANIA: AN EXTREME CASE

Reliable statistics on education in Eastern Europe are rare. Hence the interest for the figures presented below on Albania - which is in a far deeper crisis than its neighbours.

IMPOVERISHMENT AND INFLATION



GNP IN REAL TERMS (BASE 100 IN 1989), INFLATION AND EXCHANGE RATES FOR THE LEK (SOURCE: EBRD, IMF, WORLD BANK).

Economic degradation has been particularly brutal in Albania. An already weak GNP fell by a third in 1991, and by another eight percent last year. At the same time inflation rose by 200 percent.

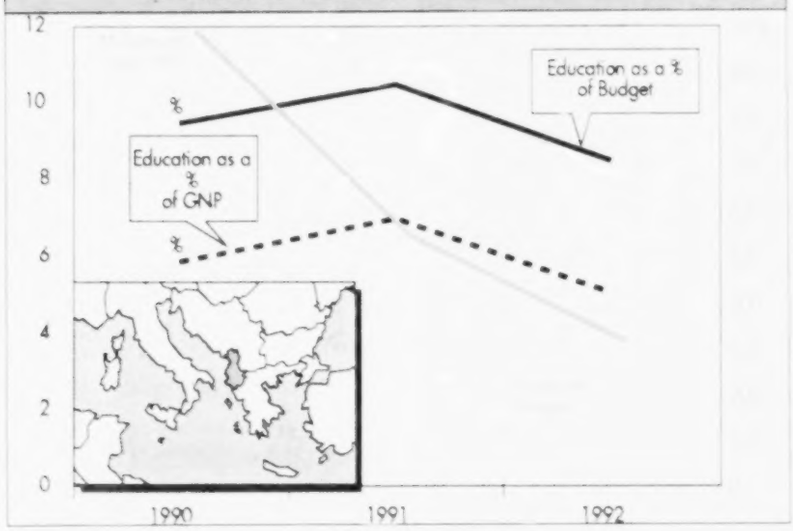
By mid-1992, it was estimated that 50 percent of the urban workforce was unemployed. Ravaged by hyper-inflation, purchasing power was cut in half.

This deterioration has had an immediate impact on education: teachers are paid between $20 and $60 a month and, increasingly, parents are keeping their children away from school, either to cut household costs or, in some cases, gain extra hands to work in the fields.

A stabilization programme has been established with the International Monetary Fund, and according to the European Bank for Reconstruction and Development (EBRD), 1993's economic indicators will be more encouraging.

EDUCATION SPENDING SLASHED

THE EDUCATION BUDGET IN REAL TERMS, AND EDUCATION AS A PROPORTION OF THE TOTAL BUDGET AND GNP.



Education has suffered more than other sectors, as is clearly revealed in a diagnosis made this year by the government, UNDP, UNICEF and UNESCO, from which all the information in this graph has been drawn.

Not only has the State budget been slashed in real terms, but the proportion allocated to education was also cut in 1992. Consequently, the education budget, in real terms, fell by 45 percent in 1991 and again by 42 percent in 1992. In other words, last year, per capita public spending on education was less than eight dollars.

Albania has decided, with the help of various international organizations, to draw up plans for the entire reform of its education system. The extreme financial difficulties mean that Albania will need exceptional donor support over the medium term. Is the international community ready to respond?

OR A PRECEDENT ?

However, the problems experienced elsewhere in the region share the same roots. Is Albania then, a sign of what's to come for the rest of Eastern Europe?

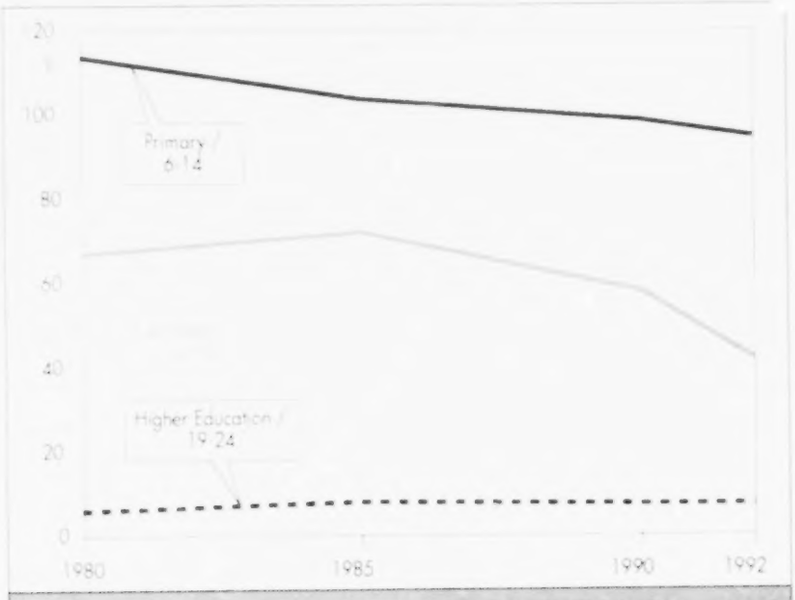
FALLING SCHOOL ATTENDANCE

A growing number of children between six and 14 years old no longer attend classes, and the number of 14 to 18 year olds in school has fallen by 27.5 percent in two years.

As with the rest of Eastern Europe, Albania had made an major effort in the field of education. However the quantitative success masked the qualitative failure - the result of generally mediocre teaching and an extremely rigid system.

The evidence reveals a growing gap between the cities and the countryside, with orphans, handicapped children and those living in remote areas, increasingly excluded. Finally, as in all of the Eastern European countries, university access has been restricted to a tiny group of the privileged.

(In some cases, the attendance of younger children and, more frequently, those older children doubling years, have pushed the ratio above 100 percent)



EVOLUTION OF THE RATIO OF CHILDREN ATTENDING SCHOOL BY AGE GROUP.

THE COLLAPSE OF TECHNICAL AND VOCATIONAL TEACHING

The former regime gave clear priority to technical and vocational education, with general secondary education being limited to a minority. In 1980, four in five secondary level students were enrolled in technical schools, which were savagely hit by the recession. On top of this, the programmes, especially in agricultural schools, were poorly adapted, with the emphasis being put on theory rather than practice and the acquisition of professional skills. Climbing unemployment and the difficulties experienced in rural zones did the rest: between 1990 and 1992, the number of students in vocational and technical schools fells by 60 percent. As in other areas of education, radical reform is an absolute necessity. Programmes need redefining and text books and manuals must be rewritten, but this will obviously push up costs.

Graphics: Alexandre Dormon

EVOLUTION OF THE TOTAL NUMBER OF STUDENTS IN SECONDARY SCHOOL, AND THOSE IN TECHNICAL AND VOCATIONAL EDUCATION.

ALL ARTICLES ARE FREE OF COPYRIGHT RESTRICTIONS. SEE P.2

PLUGGING THE BRAIN DRAIN

Eastern Europe's best and brightest are leaving their laboratories and universities in search of greener pastures.

Since 1992, some 900 researchers, or 10 percent of those employed in the 16 top research centres in the Commonwealth of Independent States (CIS), have left their jobs.

"It's not hard to understand why when you know that a senior researcher or even university professor in these countries earns between $40 and $50 a month, while monthly salaries for common workers in commercial ventures of industrial enterprises sometimes reach between $100 and $200" explains Vladimir Kouzmanov, head of UNESCO's Regional Office for Science and Technology for Europe (ROSTE), based in Venice. As well, salaries are often delayed and inflation high.

And this is but the tip of the iceberg. A series of national studies conducted under the aegis of a UNESCO project initiated by ROSTE and aimed at analysing the situation and finding solutions, show that at least 50 percent of scientists in such countries as Russia, Ukraine and Bulgaria would like to leave their jobs because of the low pay, poor working conditions, a lack of prospects for professional careers and political instability.

"The tragedy is that most of these people have left or will leave their positions for jobs in more lucrative fields that do not correspond to their professional background and intellectual potential."

This disturbing trend is known by the specialists as *"internal or intersectoral brain drain"*.

A BASIC RIGHT

Three years ago, the exodus of scientists and intellectuals fleeing Eastern Europe for the rich west was the major concern. The studies undertaken show the flood has now slowed, and although remaining a problem need not be catastrophic. *"External brain drain now accounts for only one per cent of those employed in science and higher education in the majority of Central and Eastern European countries,"* says Mr. Kouzmanov. *"Although, admittedly it is usually the best who leave. But as long as the person concerned continues working in his or her field of competence there is no danger of massive losses of intellectual potential. The knowledge produced by these individuals is the property of humanity in general and will eventually get back to their native countries."* Such professional mobility has existed in the West for a long time and is usually seen as positive, being a means to career advancement, providing access to better research facilities and technical support, and improving living standards. Freedom of movement is also considered a basic human right.

Internal brain drain, however, poses a much greater threat. The vast majority of those leaving their research and teaching positions or fields of study are aged between 25 and 45 years, which is recognized as the most productive period in scientific life. Existing analyses show that such internal movement covers 90 percent of all those who leave national research institutions.

"There's so much temptation in the private sector" explains Alexei Popyrin, 24, a student of economics at the prestigious Moscow State Institute of International Relations. A fluent English and Chinese speaker, Alexei dropped out half way through his degree and began organizing charter cargo flights from China to Russia. *"I went from a four-dollar-a-month scholarship to a $2,000 a month salary."* Although the young Russian has now resumed his studies, which he will complete at the end of this year, he is in a quandary as to what to do next. *"If I stay in the academic world I will earn peanuts and that's even if I find a job."* His fears are well founded. An International Seminar on Brain Drain Issues in Europe, organized as part of the UNESCO project and held in Venice last April, was told that the Russian Academy of Sciences, for example, has cut the number of jobs for university graduates by 800 percent over the past two years. Analysis of the situation in the Czech, Slovak and Slovenian Republics shows severe shortages of University professors and dropping student numbers. Between 1990 and the first half of this year, for example, the University of Economics in Prague lost more than 20 per cent of its staff. The seminar was told that the governments in Eastern Europe have cut spending on science and education over the past three years by 25 to 80 percent.

BRAIN DRAIN TO BRAIN GAIN

"Obviously the solution cannot be administrative" says Kouzmanov. *"And improvement in socio-economic conditions and political stability, while being the only real response, it will going to happen overnight.*

"What we need, and what the UNESCO project is working to promote, is immediate support and solidarity on a regional and international level for the intellectual life in these countries." That doesn't just mean pouring in millions of dollars. It means measures such as joint research projects between the West and the East, exchange programmes for scientists, the provision of sabbatical and part time positions for talented Eastern European scientists in major research centres and universities and the creation of 'sister institutions' - Eastern research centres attached to Western partners. The April seminar also urged the governments concerned to give top priority to the preservation of scientific schools and national centres of excellence.

The brain drain must be converted to a 'brain gain', stresses UNESCO Assistant Director General for Science, Adnan Badran. Bridges must be built so that a voyage out is not a one-way trip.

Sue WILLIAMS

CHERNO(RE)BYLDING

Seven years have passed and yet the catastrophe continues to affect the bodies - and minds - of millions.

Early one spring morning, precisely at 1.26 a.m. on April 26, 1986, the No. 4 reactor of the Chernobyl, Ukraine, nuclear power plant exploded.

That was over seven years ago. But for the 40 million inhabitants of the surrounding areas, the catastrophe is still a reality.

Already in September 1991, following initial emergency aid, the United Nations convened a conference in New York to evaluate needs, after setting up an inter-agency task force. Some 15 agencies continue to be involved, from the International Atomic Energy Agency to the World Health Organization (WHO).

UNESCO, which had early on organized humanitarian operations for the children, launched its own campaign for Chernobyl in January 1991. *"In terms of funds raised, the UNESCO-Chernobyl Programme is the second most important (after WHO) of any UN agency,"* said Bruno Lefevre, who runs the operation. *"To date it has drawn about $5.3 million, notably from associations especially German, Canada and the European Community."*

BENEFIT CONCERTS

UNESCO itself has launched or contributed to a variety of activities, including benefit concerts by such international artists as Barbara Hendricks and Montserrat Caballé, the sale of jewelry, medals and pins created by fashion designer Pierre Cardin, a *Telethon* in Russia, etc.

One of the most ambitious projects is the setting up of nine psychological *"rehabilitation"* centres in the three Republics directly concerned (Ukraine, the Russian Federation and Belarus). With construction now in its final stages, the centres are expected to open before the end of the year.

Based in Kiev, psychology professor Ludmila Bertch, 46, is responsible for co-ordination of the centres. Eminently cosmopolitan, Bertch, whose family originated in the region, was born in Germany and raised in Canada where she earned a Masters in psychology before taking her Doctorate in Amsterdam. Fluent in Russian and Ukrainian, she moved to Kiev in 1992.

Dynamic and determined, she enumerates the many reasons behind the project. She explained that the inhabitants were exposed to a truly traumatic experience, not only because of the disaster but also because of the way it was handled. *"They were told nothing,"* she said *"neither about what was happening, nor how they should act, not even what they could eat. From the beginning, they were completely in the dark, and then given contradictory information."* As a result, many victims were left with no reliable point of reference.

For the 116,000 people who had lived in the immediate vicinity of the power station, the shock of moving under such confused circumstances was particularly hard, and sometimes more painful still when elderly family members refused to move and had to be abandoned. Community and village links have been severed. The economic and social fabric of the region is in shreds, the effects of the catastrophe aggravating the economic collapse. There are countless examples of teachers becoming milkmen, farm labourers and bus drivers, not to mention all those who have resigned themselves to living on allowances of barely three dollars a month.

There has been an increase in the incidence of depression and, consequently, in the number of hospital consultations. For a variety of reasons, however, people are being hospitalized for longer periods, weeks rather than for days.

"They never stop worrying about their health," said Bertch, *"and, above all, that of their children, whether they were born before or after the disaster. Naturally the children are affected by this. Not only do they fall ill easily, but many are kept under lock and key by anxious parents. Added to this is the tragedy of unemployment and of those who have fallen ill as a result of radiation. They feel useless. Adolescents believe in nothing, and have faith neither in their parents nor in the authorities."*

But can one go so far as to identify a *"Chernobyl syndrome"*? *"Similarities can no doubt be found with the experience of people in the Three Mile Island area (a nuclear catastrophe, in the United States),"* she said. *"All population groups that have experienced catastrophes, of whatever kind, especially those which have gone through the trauma of evacuation, have something in common with those affected by Chernobyl. But, in the end, we must not forget that we are dealing with individuals, and that everything depends on what a given individual has interiorized."*

UNESCO's share in the construction and equipment of these centres, along with recruitment and training of specialists, will amount to about $1 million. The operating budget for each is expected to be about $15,000 a year which each State has pledged to provide out of public funds. The centres, three per Republic, are aimed at "high risk" groups: people who have been evacuated, the *"liquidators"* who worked in the power station and its vicinity after the accident and were seriously contaminated, and lastly, those who still live in the irradiated zone (an estimated 280,000).

What is the meaning of the term "community" centre? Experiments have

already been carried out on the basis of the concept in North America, the Netherlands and Czechoslovakia" their co-ordinator explains. *"Their main objective is to strengthen the community and encourage people to resume social life. In more concrete terms, the centres will be administered by management boards made up of local inhabitants. They will also house day nurseries and cafeterias, and are planning informative programmes on subjects as sensitive as drug taking, criminality, alcoholism, marriage breakdown, child abuse etc."*

Alcoholism, in particular, has become an increasingly serious problem, encouraged by stories that alcohol can eliminate the effects of radiation. It is even rumoured that people who worked on the power station during the days following the accident have been miraculously cured, *"saved"* by drinking 24 hours a day.

Intensive training courses were given this summer for the about 40 psychologists and social workers who will staff the centres. *"The have not been given a ready-made technique,"* said Hovich. *"On the contrary, they are encouraged to adopt an empirical approach, and there were long discussions of the need to consider cultural differences linked to people's lifestyles. Broaching questions concerning sex, for example, is not easy. Even the name given to the centres - should the word 'psychological' be used, for instance - required serious consideration because of the fear or shame this discipline may invoke."*

"Generally speaking, psychology is something new to them," Lubow Hovich said. Ukraine has only 800 psychologists with full university training for a population of 52 million inhabitants. Therapies are still largely perceived as imposed from outside on patients, of whom no personal commitment is required, and which, in addition, cut them off from social reality. Almost no form of therapy has been devised for complex cases although these have increased markedly since the explosion.

CHEAP HOUSES

A man like Nat Greenberg, you might say, has nothing in common with Lubow Hovich. Yet this 65 year old American businessman is participating in another aspect of UNESCO's Chernobyl Programme, and his involvement is as impassioned as hers. He has set up, in Belarus, a factory to supply cheap houses for the masses of displaced inhabitants.

Local industry is unable to cope, accustomed as it is to producing the huge, regulation-size boxes seen throughout the Eastern countries. Moreover, it takes at least two years for delivery of a private house. How then can the sudden demand from tens of thousands of homeless and badly housed people be met?

UNESCO helped pool energies and ideas while a team of French architects handled the design side. *"What was needed,"* Nat Greenberg explains, *"was very cheap housing which could be constructed in quantity and quickly."* This challenge has been met: $15,000 for a living area of 80m2, and the same again for transport and installation. The factory can produce five houses a day, using local materials to avoid the extra costs and production problems caused by imports.

He insists that, thanks to vastly improved materials and techniques, these houses are incomparably better in quality than earlier prefabricated models. The first prototype, just completed and installed in Minsk, will serve as a cultural centre. The factory employs 40 workers, a figure that will probably increase to 250 as production expands. It remains to be seen how the market can develop in countries where monthly salaries are calculated in tens of dollars. Public financing to assist would be forthcoming, is under study, and in any case, about 1000 houses will be built in 1994.

With other production units envisaged, notably in Russia, UNESCO hopes the programme can supply some 10,000 houses in seven years. Ultimately, along with other UN agencies, it plans to create socio-economic development zones to serve as veritable life lines for the economic, social and cultural re-insertion of displaced people.

The UNESCO Chernobyl Programme counts 70 projects, 25 of them underway, extending from the study of radioactivity in water to languages classes, notably for scientists who need foreign contacts.

"Eclectic perhaps, but all of the projects have the same basic aim," said Lefevre, *"to help prepare the future for the children, men and women who have all, to some degree, fallen victim to this unprecedented disaster."*

Nicolas MICHAUX

TO FIND OUT MORE ...

PROCEED (Programme for Central and Eastern European Development), notably 1) a leaflet describing PROCEED, and 2) a 26-page report on "UNESCO activities in Central and Eastern Europe".

CORDEE (Co-operation for Reinforcing the Development of Education in Europe). **CORDEE Newsletter**, No. 1, Paris/Bucharest June 1993. A series of institutional profiles with reports on conferences and seminars on the educational problems of countries in transition.

UIE (UNESCO Institute for Education, Hamburg, Germany): *"Education and Training in the New Europe"* in the *International Review of Education*, UIE, November 1992, describes how UNESCO, OECD and the Council of Europe are responding to the educational requirements of countries in Central and Eastern Europe.

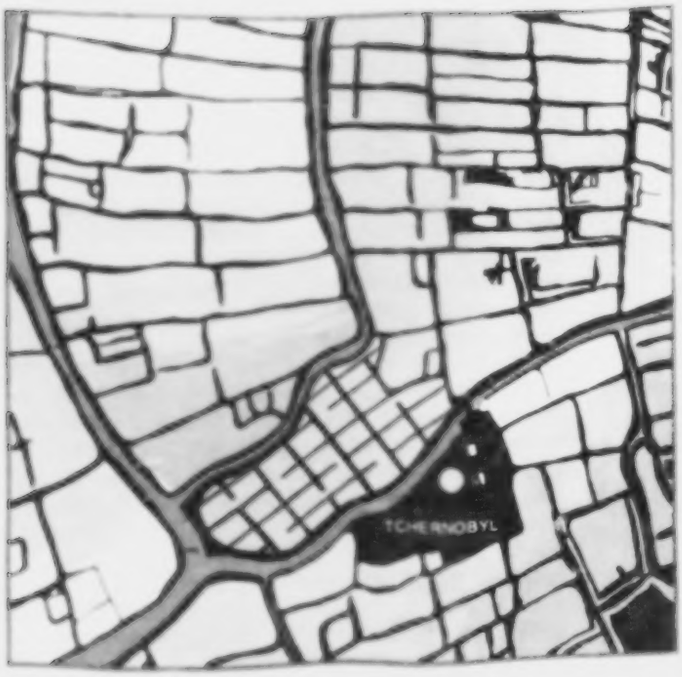
DIVISION OF HIGHER EDUCATION: a leaflet on **UNITWIN** describing UNESCO's programme on twinning and other linking arrangements between universities in key disciplines, notably through the **UNESCO CHAIRS** scheme.

DIVISION OF ENGINEERING SCIENCES & TECHNOLOGY: reports on a series of UNESCO round tables, organized with Electricité de France (EDF) on "Strategic Issues in ENERGY SYSTEM REFORMS in Central and Eastern Europe".

UNESCO Regional Office for Science and Technology (ROSTE), Venice (Italy): Proceedings and papers presented at the International Seminar on **BRAIN DRAIN** Issues in Europe", Venice, April 1993.

CULTURE SECTOR: *Culturelink*, a quarterly bulletin published in Zagreb (Croatia) for **CULTURELINK**, a UNESCO/Council of Europe network of research, information and documentation institutions/centres devoted to international cooperation for cultural development.

HELP BUILD A HOUSE



This scarf has been designed by Pierre Cardin and is offered for sale to build new homes for the victimes of Chernobyl. For 400 FF you can help build half a square metre of one of these houses and contribute to a new life...

Address your order and corresponding cheque to:
UNESCO-Chernobyl Programme, 7 place de Fontenoy, 75352 Paris 07 SP

"WE WERE THE FORERUNNERS"

Twenty five years ago, a UNESCO organized conference laid the groundwork for what has become a key to human survival.

"The needs and requirements of human societies are increasing every decade... The population of the planet is growing at an exponential rate... Industrialization is accompanied by a vast exploitation of natural resources and by a profound change in the natural environment... The felling of forests, fertilization, irrigation, soil erosion and many other results of man's activities ...are often of destructive and ... of irreversible character... breaking the established systems and relations in the biosphere of the Earth".

No-one would question this vision of the planet today, especially after the attention it received at the Rio summit last year. Placed in its historical context, however, the originality becomes immediately obvious: these observations were first formulated 25 years ago - September 4 to 13 to be precise - during the first major international conference organised by UNESCO on *"the rational use and conservation of the resources of the biosphere"*.

Indeed, 1968 was a turbulent year. Students in western Europe, and particularly in France, along with their counterparts in the US who were up in arms against the Vietnam war, were noisily proclaiming - among other things - that consumption rhymes more often with alienation than happiness.

BEYOND COMPREHENSION

But the dominating message was coming from another direction: in 1968, the period of economic boom that has become known as the *"glorious thirty"* had only run two thirds of its course. The notion of "environment", wasn't understood the way it is today, and the idea that there could be problems associated with it was almost beyond comprehension. The concept of development was certainly raising questions, but only for the Third World, and mainly because the methods that had worked so successfully in industrialised countries were not being applied as vigorously there.

In this context, a look at documents published by international agencies that year, the threshold of the first and second UN decades for development" is telling: the key to development is essentially more growth: *"It is the common hope that the pace of development in the coming decade can be quickened... If effective policies for growth are pursued in both developing and developed countries, there is no objective reason"* why the goal of a five per cent annual growth rate could not be achieved, says a 1968 UN Study of the World Economy. The report juggles with figures, with growth measured in terms of investment rates, savings, international exchanges and the transfer of resources to the Third World. In short, economic factors alone dictated the progress of *"development"*.

INEXHAUSTIBLE RESOURCES!

It is true that the *"enormous* (and not always positive) *social implications"* of development were beginning to be recognized. Humanist concerns began to enter into the debate. Recognition was given to the idea that growth at any cost engenders unwanted disparities, increasing the gap not just between rich and poor countries, but also within the latter between the haves and have nots. The answer? *"Better planning"* to achieve even higher growth rates of 6 and 7 percent".

In any case, the implicit assumption was that resources were inexhaustible. The question of their durability was never posed. As for the environment, the 1967 United Nations Year Book completely ignores it. The following year's version devotes five out of 1215 pages to the issue, essentially on the UNESCO conference organised the same year. However the issue is looked at from extremely narrow angle: *"air and water are polluted"*, *"the environment is being degraded"* by over-industrialisation and uncontrolled urbanisation and... fallout.

In short, humanity's relationship to nature was seen as *"brutal and dominating"*, according to physicist and Secretary General of the UNESCO conference, Michel Batisse. Its conquest was justified on philosophical and religious grounds, with the view that if the process could be accelerated by scientific and technical progress, so much the better. In a worst-case scenario, this same omnipotent progress could be counted on to undo whatever damage humanity inflicted on nature. The only

---

How can we preserve our precious library and archival collections? A new UNESCO programme **MEMORY OF THE WORLD** sets out precisely to do the job by building

digitized image banks around these endangered documents. The International Advisory Committee for the Programme meeting for the first time in Pultusk (Poland) from September 12 to 14, recommended that it be made accessible to a broad public and that the concept of documentary heritage be enlarged to include audio-visual materials and oral traditions.
A CD-ROM is already available on manuscripts and incunabula from the National Library in Prague (see illustration).

▼

The ***STRUGGLE AGAINST DRUG ABUSE*** was the subject of an inter-agency meeting held at UNESCO from September 6-8. Representatives of the UN and eight of its agencies fine-tuned their activities being undertaken within the "System-Wide Action Plan" (SWAP) against drug abuse. UNESCO is involved in a range of SWAP initiatives, including, for example, a two-year joint effort with UNICRI (United Nations International Crime Research Institute) to train women to teach preventative education to their peers in Mediterranean countries.

UNESCO SOURCES

All articles are free of copyright restrictions and can be reproduced

exception to this general attitude concerned the few zones to be *"conserved"* or *"protected"* - in other words to be *"put under glass"*, says Professor François Bourlière (conference Chairman), to serve as museums of flora and fauna and those jewels of nature considered too precious to be disfigured.

The conference, organized with the help of the UN, FAO and WHO, brought together over 300 delegates, for the most part scientists from some 60 countries. It was an occasion says Professor Bourlière, *"for a minority from the scientific community to express in strong terms"* opinions that were were to lay the ground for a radical new way of thinking.

Terms, hitherto confidential, found their way into common parlance. Terms such as "biosphere" - literally, the sphere of life, that thin layer of the earth's surface where life is concentrated - or "ecosystems", the units that compose the biosphere and in which *"living organisms manifest their characteristics through constant interaction with their surroundings, creating thereby a certain degree of systematic order"*.

For the first time in such an international arena, human beings were seen as *"a key element of the biosphere"*. However, it was pointed out that if *"immediate success"* was used as the only criterion, human intervention on the biosphere could have *"irreversible"* effects. Whence the call for the *"rational use and conservation of natural resources"* - with common sense being the measure to resolve the contradiction between use and conservation.

Given their inevitable impact on the environment, underlined the conference participants, human decisions must be based on scientific knowledge, from both the natural and social sciences, as economics and politics, for example, have an obvious bearing on this impact. An inter-disciplinary approach and long term goals based on the understanding that global resources are not unlimited, is the only way forward. A global perspective is also important because localised projects have repercussions on the biosphere. There is already a hint at this ground-breaking conference of *"sustainable development"*, 24 years before the concept was enshrined at the Rio summit.

COMMITTED SCIENTISTS

"We were the forerunners", says Michel Batisse, adding immediately that *"we were not geniuses, but we knew what we were talking about"*. For years these *"committed scientists"* as Professor Bourlière describes them, had been calling for research to be responsive to the needs and demands of the planet's inhabitants. Given UNESCO's intergovernmental nature and universality, wanting to know more about the environment necessarily implied a commitment to the needs of member states, in particular those from the Third World. Even then, what we today call the ecological crisis, was one of the basic ingredients for poverty and vice-versa.

From this conference was born the International Man and Biosphere Programme (MAB) which has fuelled the debate and carried the message of these pioneering scientists ever since, a message that the Earth Summit ratified in Rio de Janeiro last year. Today it is working in more than 100 countries, helping to guide the management of terrestrial and aquatic environments.

But MAB must take care not to rest on its laurels, and prove its ability to remain at the forefront on the environmental debate if we are to celebrate its golden anniversary.

René LEFORT

●

MAB NATIONAL COMMITTEES OF 18 EUROPEAN COUNTRIES met in Zakopane (Poland) from September 5 to 12. The 92 representatives of 8 Eastern and 10 Western European countries focused on MAB inter-European cooperation, highlighting the Biosphere Reserve Integrated Monitoring Programme (BRIM) and an Action Plan for Protected Areas in Europe. Poland's National MAB Committee also elaborated a programme

to establish 4 international biosphere reserves on the border with Belarus, Ukraine, Slovakia and Germany. Eight parallel working groups discussed MAB activities and future plans of the Northern Sciences Network, the Blue Danube Project, the Chernobyl Ecological Science Network, etc. and set up a 9th group on "Biosphere Reserves and People"

▼

An International Conference on **EDUCATION FOR ALL (EFA) IN CENTRAL AND EASTERN EUROPE** was organized on the initiative of the Polish Government and UNESCO in Warsaw (Poland) from September 9 to 11. It was attended by representatives of all the countries in the region except Albania. Participants unanimously recognized that EFA goals are not only relevant to the developing world but also to societies in transition. They recommended that UNESCO, in the framework of PROCEED (see pp. 7 & 8), elaborate a project *"EFA - meeting basic learning needs in Central and Eastern Europe"* focused on joint activities and networking among education ministries and other specialized bodies, to include the exchange of information and pedagogical materials, research and training programmes, the organization of expert meetings and research workshops.

●

"When a voice given from God can be an ***INSTRUMENT TO HELP A GREAT CAUSE*** *like yours, then a man must feel privileged, and I am very, very privileged,"* said world famous tenor Luciano Pavarotti. The occasion was his meeting on September 2 with Professor Luc Montagnier and Federico Mayor, Director-General of UNESCO who created the World Foundation for AIDS Research and Prevention last January. It preceded Pavarotti's outdoor concert in Paris before 100,000 people. He donated 10 per cent of his fee to the Foundation. The Foundation, which has its offices at UNESCO's Paris Headquarters, aims to accelerate AIDS research and step up prevention particularly through education.

▼

One in three adult women in the world today cannot read and write. Under the title ***"EDUCATION FOR WOMEN AND GIRLS: AN URGENT NECESSITY"***, the current issue of the quarterly bulletin EFA 2000 (No. 12) takes stock of progress made since the 1990 Jomtien

(Thailand) World Conference on Education for All (EFA) which called education for girls and women the *"most urgent priority"*. Since that time, many countries and donors have taken action in favour of girls' schooling, but basic education for adult women has lagged far behind.

UNESCO SOURCES

All articles are free of copyright restrictions and can be reproduced.

HOW FAR SHOULD WE GO?

Genetic engineering: some call it playing God, others see it as humanity's saviour...

"After all, we don't really know very much about the facts of life." This might sound like a particularly odd comment coming at a gathering of eminent scientists, doctors and intellectuals, including four Nobel prize winners. However it provided a good indication of the complexity of the issue at hand and was received with an almost unanimous nodding of heads.

The meeting, held over September 15 and 16, was the first session of the 50-member International Bioethics Committee (IBC), established by UNESCO in a bid to cut a clear path through the still largely unknown terrain of the human genome and its impact on society.

The international study of the human genome, or genetic map, that determines the characteristics of each of us, with which UNESCO is cooperating, has led to the identification of the genes responsible for a range of illnesses, such as Hemophilia, Cistic fibrosis and Thalassemia. It has provoked research into the genetic origins of certain types of cancers and their possible cure through the use of gene therapy. But it has also opened the door to a myriad of *"doubtful hypotheses"*, according to Committee Chairperson Noelle Lenoir of the French Constitutional Court, linking, for example, alcoholism or even criminal violence, to our genetic make-up.

The knowledge at our fingertips has fabulous potential for humanity, but it could also prove to be an ethical pandora's box.

DISCRIMINATION

"We may be tempted... for example, to reduce people to the sum of their genes" warns Dr. John Fleming, Director of the Southern Cross Bioethics Institute in South Australia, *"and then divide them up into the good guys and the bad guys - those with good genes and those with bad genes."*

Into which category would employers or insurers put those people who have inherited predispositions for heart disease or cancer? Should insurance companies, or even the State, be entitled to such information? Dr. Fleming tells of a recent debate that flared in Australia when the idea that homosexuality may be gene-linked hit the headlines. *"The question was seriously raised as to whether embryos with such genes should be aborted."* A problem has already arisen in India with the amniocentesis procedure, a standard prenatal genetic screening that reveals abnormalities in the foetus. It also allows mothers to know the sex of their baby. *"A disturbing number of women in India are aborting female embryos because boys are far more valued in Indian society than girls"* explains writer and poet, Anees Jung, *"to the point where authorities have now begun outlawing abortions on the basis of the embryo's sex."*

"And this is just the start," says Dr. Fleming. *"What about embryos, for example, that show an inherited predisposition to a lower I.Q. or some characteristic that we think is unacceptable? Who will decide, and on what basis, those characteristics that are better or worse?"*

BACK TO PLATO

The issue of eugenics, or selective breeding, is as old as Plato, who proposed in the "Republic" *"as many unions of the best of both sexes, and as few of the inferior, as possible."* While it has known periods of popular support, and has even been written into the legislation of various countries at times, recent surveys indicate a certain reticence to what is often perceived as *'playing God'*. In Japan, for example, 74 percent of the population thought such manipulation *"unacceptable"* in a 1991 survey carried out by Darryl Macer from the Institute of Biological Sciences in Ibaraki. A 1987 survey in the United States, carried out by the Office of Technology Assessment (OTA) found that 46 percent of the population agreed with the statement that *"we have no business meddling with nature"*.

Even so, acknowledged the IBC members, public opinion can swing wildly. The same people surveyed by OTA said they would support specific applications of genetic engineering. While the idea of abortion based on sex would be generally abhorred, few would contest the merit of amniocentesis, which in Europe alone, according to Macer, has decreased the incidence of Downs syndrome by 30 to 50 percent.

"The problem is that while genetic manipulation or engineering certainly grabs

the headlines, information is usually inadequate and misleading" said Koussay Dellagi, Director of the Pasteur Institute of Tunis. *"Our experience in Tunisia shows general confusion between the advances in knowledge and their application. Consequently people believe that cures have been found for various diseases and they demand access to them.*

This leads to yet another major question for the committee: how can the knowledge and benefits that come out of genetic research be shared equitably? Will they be reserved for the rich west? asks M. Dellagi. Without a doubt, the patenting of knowledge arising from the human genome project and the technologies that flow from it, for commercial purposes, promises to be one of the most controversial issues the committee will have to deal with. According to figures gathered by Darryl Macer, world sales of genetic engineering products this year is expected to top three billion dollars - triple the volume of 1989. In the agricultural domain, biotechnology is expected to contribute $50 billion by the year 2000.

"There is much potential, such as for universal vaccination programmes and improved crops" says Macer *"but the priorities of companies (holding patents) will be to make a profit."*

"One of the things that I feel sure will come out of the human genome project is that we will be able to switch off a harmful gene to reduce the impact of disability on a whole range of people. What a pity if this was so prohibitively expensive that the very people who need it could not get it. Can commercialisation be justified in this case?" says Dr. Fleming.

Hence the need for some sort of international agreement. Several countries already have legislation in place, but these laws tend to be extremely diversified. In Germany, for example, research is forbidden on human embryos except for therapeutic reasons, whilst the United Kingdom allows all research up until 14 days.

The Committee is the first international body charged with examining the ethical questions arising from human genome research. Its task is to promote discussion and the diffusion of information on the problems provoked by developments in genetic research on a global level, and in the longer term, to prepare an international convention on the protection of the human genome. While such an agreement must be flexible enough to deal with changing knowledge and cultural differences, *"it should harmonise and coordinate ideas of principle"* based on the protection of human rights according to Mr. Dellagi.

"Ethics is also a language" says Noelle Lenoir. *It allows for dialogue between the specialists and the decision makers, and squarely places the latter in front of the problems facing the whole of humanity: how to make the most of scientific knowledge; how to harmonize the rapport between individuals and society, and finally how to ensure the survival of the human species."*

Sue WILLIAMS

●

"I know I can count on you to pursue and renew your efforts to lay the foundations in the minds and hearts of young people for the necessary transition from a culture of war to a culture of peace." With these words, Director-General Federico Mayor inaugurated an International Symposium on the occasion of the **40TH ANNIVERSARY OF THE UNESCO ASSOCIATED SCHOOLS PROJECT** (ASP) in Soest (Germany) from September 12 to 17. ASP Coordinators and experts from some 50 countries attended, reviewing activities and planning for the future. They also selected 12 winning drawings from about 64 submitted to an ASP Contest on the theme "What our Family likes to do together".
The drawings will serve as the first ASP calendar, to be produced for the International Year of the Family (IYF 1994).

▼

South African singer ***MIRIAM MAKEBA*** and Polish composer ***KRZYSZTOF PENDERECKI*** are the winners of the 1993 UNESCO-IMC Music Prize. Miriam Makeba was chosen not only as a singer but also as a voice for oppressed Blacks around the world. Penderecki, is one of the outstanding composers of the second half of this century. His works which include those written in memory of the victims of Hiroshima and Auschwitz, bear witness to his profound humanitarian outlook.
The Prize was presented on September 22 in Alicante (Spain).

●

An **"INTERNATIONAL YOUTH FORUM"** was held for the second time by the Korea UNESCO Youth Centre from August 10-20. Under the aegis of the Korean National Commission for UNESCO, the event gathered 78 young people from more than 30 countries worldwide. This year's Forum centred on "Youth Shaping the Future" and combined lectures, field visits, cultural exchange programmes, discussions and workshops, allowing the participants to analyse their present and future, and involve themselves in the construction of a new concept of Youth and its role for the years to come.

THE BUSINESS OF CITIZENS

A new NGO, launched with UNESCO's help, demands a new approach to the safeguarding of the world's historic cities.

"*Never more the city-museum. Never more cities without children. Citizens must come before stones*" declared Marcel Junius, Secretary General of the newly formed World Heritage Cities Organization, which met in Fez (Morocco), from September 6-8.

Mr. Junius, emphasised that the safeguarding of historic cities is not only the affair of the specialists - the architects, historians and urban planners. First and foremost, he says, it is the business of the citizens who inhabit these cities.

RECONCILING THE OLD AND THE NEW IN KATMANDU (Photo UNESCO/Pushpa Man Chitrakar)

The Fez meeting, attended by 56 representatives of cities on UNESCO's World Heritage List including the mayors of some 30 of them, saw the official launch of the Organization. Its task: to contribute to the enactment of the World Heritage Convention and favorise cooperation and information exchanges between listed cities.

It was also the occasion for a colloquium on how to finance safeguarding and restoration operations in these cities that are often thousands of years old, overcrowded, and poorly adapted to the trappings of modernity: cities such as Cuzco in Peru, Katmandu in Nepal and Sana'a in Yemen, to name but three of the 81 cities on the World Heritage List.

At first glance the sums required for the the job are daunting, reaching into the hundreds of millions of dollars.

However, the participants at the Fes meeting concluded that the necessary finances were available, and that tapping them required a change of vision. Rather than seeking vast sums from the international community, for example, inhabitants and property owners need to be recognized as active partners in the undertaking and encouraged to "*look after their own backyard*".

A VIABLE UNDERTAKING

The medina of Tunis was cited as a good example of how this can be done. The campaign there combined State funds for the restoration and revitalisation of monuments, advantageous loans and technical support for property owners to restore and rehabilitate their homes, buildings, and businesses, capped off by a concerted push to develop tourism which brought in a steady flow of income for those who invested in the site. A similar approach is being taken by the Moroccan authorities for the Fes Medina (see Sources No. 50).

Not only does this broad participation help keep these historic centres alive, it also helps create jobs and sources of revenue: it makes investing in your city a viable undertaking. It is also a necessary undertaking.

Cities have always acted as a magnet. Estimates show that between 1959 and 2025, for example, world population will have multiplied by 3.25, but the number of inhabitants in the world's cities will have multiplied almost sevenfold. How will the historic centres, these treasure troves of human history, cope with such an influx if the effort is not made now to protect them, and at the same time, adapt them to changing lifestyles?

As UNESCO's Director General, Federico Mayor, told the participants during his opening speech: "*the challenge for all of us is to involve every child, every man and woman, in our efforts to reconcile the old with the new, the historic with the modern. This is ultimately the best guarantee for the preservation of our common heritage.*"

S.W.

●

ARAFAT, RABIN AND PERES are the winners of the 1993 Felix Houphouet-Boigny Peace Prize. The jury, meeting at Headquarters on September 17, agreed that the most spectacular and important event this year was the agreement between the Palestinians and Israel, and therefore awarded the Prize to the Chairman of the Palestine Liberation Organization, Yasser Arafat, on the one hand, and to Israel's Prime Minister Yitzhak Rabin and Foreign Minister Shimon Peres on the other. Created in 1989, the Prize is awarded to individuals or institutions for their contributions "*to the promotion, research, safeguarding or maintenance of peace, as well as to the defense of human rights and freedoms.*"

▼

A rise in primary enrolment everywhere (except in parts of Africa), an increase in retention rates, firm recognition of the importance of non-formal education and early childhood care and education, and, for the first time, projections pointing to a decrease in the absolute numbers of illiterates by the year 2000: these are some of the positive trends which emerged at the ***INTERNATIONAL CONSULTATIVE FORUM ON EDUCATION FOR ALL*** (EFA) held in New Delhi (India) from September 8 to 10. The Forum - responsible for follow-up to the 1990 World Conference on EFA in Jomtien (Thailand) - also noted that financial aid for basic education had risen significantly since the Conference. It was forced to report, however, that in certain countries EFA goals had yet to be set and the disparities between boys and girls yet to be narrowed. Most important of all is the need for the world community to take up the challenge of Africa and provide enhanced support to a continent which is slipping backward.

UNESCO SOURCES

All articles are free of copyright restrictions and can be reproduced

"STATUS AND TRENDS"

Are governments seriously pursuing education for all? A new UNESCO report reviews the situation.

China, the Republic of Korea, Singapore, Sri Lanka and the United Arab Emirates have achieved full enrolment for primary age children. On the other hand, Liberia, Bhutan, Afghanistan, Mali and Somalia still have less than 23 percent of their primary children in school.

According to "Education for all: Status and Trends", just published by UNESCO, more girls are attending primary school around the world now than 10 years ago. However, two thirds of the world's illiterates are still women.

The 48-page report, which presents an overview of education around the world, is the first of a series of publications monitoring progress towards the goals set by 155 countries at the World Conference on Education for All in Jomtien, Thailand, in 1990. *"This report brings together a number of indicators that can help us see the general picture and determine which countries are really making an effort"* says Michael Lakin, Executive Secretary of the International Consultative Forum on Education for All, an interagency global watchdog monitoring the follow-up to the World Conference.

Status and Trends" reports there are an estimated 948 million illiterate adults in the world, but predicts this figure will fall to about 935 million at the end of the century. *"This decline will be mainly due to progress achieved in east Asia, including China, and to a smaller degree, in Latin America and the Caribbean."* The report also shows that educated women have fewer children (see graph). Consequently the primary school age population is growing at a slower rate than the rest of the population. *"In India, for example, where total population will increase by 2.2 percent annually this decade, the number of children who need a place in school will grow by only 1.6 percent per year."*

20 MILLION TEACHERS

Nonetheless, the report estimates that to meet the goal of universal primary education by the year 2000, some 20 million primary teachers will be needed in the developing regions - four million more than today. *"In particular, more women teachers will be needed if girls are to have a fair chance in schooling."*

Despite an increase from 44 to 47 percent in female enrolment rates over the past decade, the gender gap persists and, says the report, *"unless the world community targets female illiteracy, it will continue well into the next century". "Efforts should be concentrated in South Asia, sub-Saharan Africa and the Arab States, which currently account for more than 400 million illiterate women."*

In terms of funding, government spending on all levels of education as a share of gross national product (GNP) rose slightly throughout the 80s. Latin America and the Caribbean and sub-Saharan Africa were the two regional exceptions to this trend.

"It is extremely important that governments know that their performance in implementing the Education for All goals is being observed" says Mr. Lakin. *"This report should encourage those countries that are making a sincere effort, and give a clear signal to those who aren't to get moving."*

S. W.

Women's education and fertility rates

Photo Lemoyne UNICEF Graphic A. Kokoski

☛ *Available from the Division of Basic Education, UNESCO, 7 place de Fontenoy, 75352 Paris 07 SP, France.*

●

TURKMENISTAN on August 17, **ERITREA** on September 2 and the Solomon Islands on September 7 became Member States of UNESCO by signing the Organization's Constitution. These new adhesions bring the number of Member States to 178.

▼

Sabenta National Institute of Swaziland, the Indian National Federation of UNESCO Clubs and Associations (INFUCA) and the Illiteracy Eradication and Adult Education Project, Ministry of Education, Jordan, were the winners of UNESCO's ***INTERNATIONAL LITERACY PRIZES*** for 1993. The prizes were awarded in New Delhi (India) on September 8, International Literacy Day, during the 2nd Meeting of the International Consultative Forum on Education for All. "Honorable Mentions" were also attributed (see p. 5). The Sabenta Institute received the International Reading Association Award for *"having served as Swaziland's vehicle for its campaign to eradicate illiteracy and promote community development"*. INFUCA won the Noma Prize for its action in favour of underprivileged groups, and the Jordanian project took the King Sejong Literacy Prize for having, through its work with children aged 6 - 16, helped bring the primary enrolment rate to 97% by 1992.

UNESCO SOURCES is a monthly magazine published by the United Nations Educational, Scientific and Cultural Organization. English and French editions are produced at Paris Headquarters; the Spanish and Catalan editions in cooperation with the UNESCO Centre of Catalonia, Mallorca 285, 08037 Barcelona, Spain.

Editor-in-Chief: R. Lefort. **Associate editors**: B. Werther, S. Williams, N. Michaux. **Assistant Managing Editor**: C. Mouillere. **Spanish edition**: F. Koucmou (Barcelona), C. Medrano (Paris). **Lay-out**: G. Traiano, F. Ryan. **Circulation and Secretariat**: D. Maarek.

Photoengraving and printing: in UNESCO Workshops. **Distribution**: by UNESCO's specialized services.

A symposium on **"MIRO AND THE ARTS"** to commemorate the 100th anniversary of the Spanish painter's birth, will take place at Headquarters on November 22. In Copenhagen (Denmark) on November 22 and 23, the advisory Group of the UNESCO/MAB **NORTHERN SCIENCES NETWORK** (NSN) will discuss multilateral programme activities for the management, exploitation and protection of terrestrial and marine resources in northern regions. **INTERNATIONAL DAYS** to be celebrated throughout the UN system include: **WORLD AIDS DAY** on December 1, and International **DAY OF DISABLED PERSONS** on December 3. Ceremonies at Headquarters marking **HUMAN RIGHTS DAY**, December 10, will include presentation of the **UNESCO PRIZE FOR PEACE EDUCATION.** Finally **INTERNATIONAL VOLUNTEER DAY**, December 5, will be celebrated at Headquarters with ceremonies and inauguration of an exhibition staged in collaboration with UN Volunteers and the Coordinating Committee for International Voluntary Service, on the last day of the 19th Collective Consultation with UNESCO of about 70 **NON-GOVERNMENTAL YOUTH ORGANIZATIONS** held mainly in Jambville (France) from November 29 to December 3. A Pan African Symposium on **THE STATUS OF THE ARTIST IN AFRICA** will be held in Brazzaville (Congo) from December 1 to 4, in collaboration with the African Association Against Piracy. During the 10th Annual Collective Consultation of NGOs concerned with Education for All, at Headquarters from December 6 to 10, a 3-day **"CITIZEN CONGRESS"** on the theme "What Basic Education for An Active Citizenry?" will be held from December 6 to 8. At its 17th session from December 6 to 11 in Cartagena (Colombia), the **WORLD HERITAGE COMMITTEE** will, notably, examine the state of conservation of cultural and natural sites (currently 378) and the inscription of new ones on the World Heritage List. The **UNITWIN/UNESCO CHAIRS PROGRAMME IN SPAIN,** notably the 10 Chairs already established and two others under consideration, will be evaluated by some 60 representatives of Spanish universities at Headquarters on December 7.

OUR NEXT ISSUE will focus on the International Commission on Education for the Twenty-First Century (the "Delors Commission"), its purpose and some of the crucial issues under discussion.